IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Indra LAKSONO
Title:	ADAPTIVE BANDWIDTH FOOTPRINT MATCHING FOR MULTIPLE COMPRESSED VIDEO STREAMS IN A FIXED BANDWIDTH NETWORK

App. No.:	09/823,646	Filed:	March 30, 2001
Examiner:	David J. CZEKAJ	Group Art Unit:	2621
Customer No.:	29331	Confirmation No.:	8519
Atty. Dkt. No.:	1459-VIXS002		

Mail Stop AF
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

REMARKS IN SUPPORT OF
THE PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir:

In response to the Office Action mailed March 14, 2008 (hereinafter "the Final Action") and the Advisory Action mailed June 17, 2008, and pursuant to the Notice of Appeal and Pre-Appeal Brief Request for Review submitted herewith, the Applicant requests review of the following issues on appeal. In order to facilitate full consideration of the remarks filed herewith, the Applicant respectfully requests that the Art Unit Supervisor designate a panel composed of at least three examiners.

Claims 65-96 are directed to solely statutory subject matter and the specification provides support for the claimed "computer readable medium"

The Final Action rejects claims 65-96 under § 101 because of a coincidental use of the term "medium" in the "computer readable medium" originally recited by claims 65-96 and with respect to a medium for propagating a signal as described in the specification of the Present Application. In an effort to clearly distinguish the claimed subject matter from the propagation medium aspect, these claims were amended to instead recite "a computer readable memory." *See Response to Final Action*, pp. 9 and 10. The Office has entered these amendments for the purposes of appeal. *See Advisory Action*, p. 1. However, in the Advisory Action, the Office again returns to the discussion of the "medium" can include a carrier signal, even though the term "medium" is not presently recited in the claims, but instead recites a "computer readable memory," to which the disclosure of

propagating a carrier signal via a medium is irrelevant as one of ordinary skill in the art will appreciate that a "computer readable memory" clearly does not encompass a carrier wave.

With respect to claims 81-95, it appears the Office objects to these claims in that they recite "means for" features and the Office notes that the specification teaches that "the video decoder/renderer 420 [is] performed via software application." *Final Action*, p. 3. As best understood, it appears that the Office is concerned that the claimed "means for" features could be implemented merely as software. However, it will be appreciated that software, by itself, is merely an abstract representation of a set of instructions to be executed by a processing system and thus software, by itself, is not a "means for" doing anything. Rather, it is the software and the processing system which executes the software that together constitute the "means," and thus a software-based implementation of the recited "means for" in claim 81 and its dependents properly would necessarily include both the "software" and the processing system that executes the "software" to achieve the recited function. *See, e.g., Present Application*, p. 10, line 27 to p. 11, line 3. Thus, as the combination of "software" and the processing system that executes the "software" is patentable subject matter under 35 U.S.C. § 101, claims 80-95 are directed solely to statutory subject matter.

At page 3 of the Advisory Action, the Office further asserts "the terminology 'computer readable memory' as recited in the amended claims does not have support in the specification." However, as noted at page 9 in the Response to the Final Action, the specification provides clear support for the terminology "computer readable medium." To wit, the specification teaches:

> One implementation of the invention is as sets of computer readable instructions resident in the random access memory of one or more processing systems configured generally as described in FIGS. 1-4. Until required by the processing system, the set of instructions may be stored in *another **computer readable memory, for example, in a hard disk drive or in a** removable *memory such as an optical disk for eventual use in a CD drive or DVD drive or a floppy disk for eventual use in a floppy disk drive*.

Present Application, p. 10, line 27 to p. 11, line 3 (emphasis added). It should be noted that recitation of "another" computer readable memory in the second sentence of the above-cited passage clearly indicates that the recited "random access memory" of the first sentence also is a "computer readable memory."

In view of the foregoing, it is respectfully submitted that claims 65-96 are directed solely to statutory subject matter and that there is sufficient support in the specification for the term "computer readable memory" as recited by these claims.

Banks and Putzolu fail to disclose or suggest compressing at least one of a plurality of multimedia channels of a data stream when the transmission of the data stream is not expected to meet a predetermined criteria

The Final Action rejects claims 49-58 under 35 U.S.C. § 103(a) as being unpatentable over Banks (U.S. Patent No. 6,139,197) and rejects claims 59-96 under 35 U.S.C. § 103(a) as being unpatentable over Banks in view of Putzolu (U.S. Patent No. 6,584,509). Independent claim 49 recites the features of "determining whether a transmission of a data stream having a plurality of multimedia channels is expected to meet a predetermined criteria" and "compressing at least one of the multimedia channels in the data stream to generate a first compressed data stream when the transmission of the data stream is not expected to meet the predetermined criteria." As discussed at page 14 of the Response filed January 22, 2007 and as discussed at page 4 of the Brief in Support of the Pre-Appeal Request for Review filed March 20, 2007, Banks fails to disclose or even suggest a data stream having a plurality of multimedia channels, much less determining that such a data stream meets a predetermined criteria, and if not, compressing at least one of the plurality multimedia channels to generate a compressed data stream as provided by claim 49. In particular, Banks discloses the transmission of only a single multimedia channel (i.e., "video file") and no contemplation of the transmission a data stream having a plurality of multimedia channels is provided anywhere in the disclosure of Banks. As Banks fails to disclose or suggest the transmission of such a data stream, Banks necessarily fails to disclose or suggest compressing at least one or more one or more of a plurality of multimedia channels of such a data stream in any manner, much less "when the transmission of the data stream is not expected to meet the predetermined criteria" as recited by claim 49. The Office's rationale in the Final Action with respect to Banks disclosing "pre-compressing the streams" and thus allegedly "determining that the transmission of the stream will not meet a predetermined criteria" is irrelevant as the "stream" of Banks to which the Office refers is merely a single-multimedia channel stream, rather than the recited "data stream comprising a plurality of multimedia channels" of claim 49.

Further, at page 3 of the Advisory Action, the Office asserts that "it is well known in the art that streams transmitted via a video server comprise multiple channels." However, the issue is not whether it is generally known to transmit a data stream comprising multiple channels, but whether

the relied-upon reference used in the rejection, i.e., Banks, teaches or suggests transmission of a stream of multiple channels, and further that at least one channel of the multiple channels of such a stream is compressed when the transmission of the data stream is not expected to meet a predetermined criteria as provided by claim 49. As discussed above and in previous responses, Banks fails to disclose or suggest this aspect. Banks therefore fails to disclose or suggest each and every feature of claim 49 and its dependent claims 50-58.

To illustrate, dependent claim 51 recites the features "compressing at least one multimedia channel of the first compressed data stream to generate a second compressed data stream when the transmission of the first compressed data stream is not expected to meet the predetermined criteria." The Office rejects claim 51 under the rationale that "Banks discloses 'compressing at least one channel of *the* stream to generate a second compressed stream . . . ' (Banks: column 6, lines 1-25, wherein the second stream is the stream from the less-compressed video file)." *Final Action*, p. 4 (emphasis added). Dependent claim 51 provides for the compression of at least one multimedia channel of the first compressed data stream, which independent claim 49 provides is generated from the compression of at least one multimedia channel of another data stream. Banks fails to disclose or suggest the compression of a multimedia channel from a stream that has already been compressed by compressing one or more of its plurality of multimedia channels.

As another example, dependent claim 53 recites the features of "wherein the predetermined criteria includes a real-time transmission of *each* of the multimedia channels [of the plurality of multimedia channels of the data stream]." Dependent claim 54 recites the features of "wherein the predetermined criteria includes a transmission of the data stream within a predetermined bandwidth." The Office asserts that these features are found in the passage of Banks at col. 6, lines 1-5. *Final Action*, p. 5. This relied-upon passage merely provides that the server 132 selects between either the video file 134 or the video file 140 for transmission from the server 132 to the client 110 based on the "specified frame delivery rate and the bandwidth between server 132 and client 110." Banks does not disclose or suggest that either the video file 134 or the video file 140 *has a plurality of multimedia channels*, and thus the selection between the video file 134 and the video file 140 based on the bandwidth/frame delivery rate does not equate to the compression of at least one multimedia channel of a data stream having a plurality of multimedia channels based on a real-time transmission of each of the multimedia channels (as provided by claim 53) or based on a transmission of the data stream [having the plurality of multimedia channels] within a predetermined bandwidth.

Claims 59-64 depend from independent claim 49. The Office bases its rejection of these claims on the same rationale as applied by the Office with respect to claim 49 (as described above, while determining that "claims 59-60 differ from claim 49 in that claims 59-60 further require using a round-robin mode of selection," for which the Office points to Putzolu). As discussed above, Banks fails to disclose or even suggest transmission of a data stream having a plurality of multimedia channels and thus fails to disclose or suggest the features of claim 49 related to such a data stream. Putzolu fails to compensate for the deficiencies of Banks with respect to claim 49. Thus, the proposed combination of Banks and Putzolu fails to disclose or suggest each and every feature of claims 59-64 at least by virtue of their dependency from claim 49. Moreover, because Banks fails to disclose or suggest a data stream having a plurality of multimedia streams, one of ordinary skill in the art would have no need for the "round robin scheme" allegedly taught by Putzolu. Thus, one of ordinary skill in the art would not find it obvious to combine Banks and Putzolu as proposed by the Office.

Independent claims 65 and 80 recite similar features to claim 49 in the context of a computer readable memory and a system, respectively, and thus the combination of Banks and Putzolu fails to disclose or suggest each and every feature recited by claim 65 and its dependent claims 66-80 and each and every feature recited by claim 80 and its dependent claims 81-96 for at least the same reasons provided above with respect to claim 49. Moreover, the dependent claims recite additional novel features.

Conclusion

As discussed above, the Office fails to establish that any of the claims are directed to non-statutory subject matter or that the cited references disclose or suggest each and every element recited by any of the pending claims. Accordingly, reconsideration and withdrawal of the anticipation rejection is respectfully requested.

Respectfully submitted,

/Ryan S. Davidson/   July 14, 2008
Ryan S. Davidson, Reg. No. 51,596   Date
LARSON NEWMAN ABEL POLANSKY & WHITE, LLP
5914 West Courtyard Dr., Suite 200
Austin, Texas 78730
(512) 439-7100 (phone) (512) 439-7199 (fax)